

**Strategic Management of Salespeople when Promoting New Products –
Moderating effects of sales-related organizational psychological climate**

Introduction

The purpose of this paper is to examine the performance of salespeople when selling new products (namely, electronic goods) in a business-to-business (B2B) context by incorporating the organizations' perceived psychological climate into goal orientation theory. Scholars have been examining the factors that contribute to or hinder salespeople's performance (Fu *et al.*, 2009; Silver *et al.*, 2006; VandeWalle *et al.*, 1999). Moreover, academics have been interested in knowing what type of organizational psychological climate can foster an environment that is suitable for salespeople when they sell new products (Baer and Frese, 2003; Evans *et al.*, 2007; Jaramillo *et al.*, 2007; Matear *et al.*, 2002).

Although scholars have examined some issues related to product introduction and sales management, the importance of salespeople when selling new products still requires further investigation (Fu *et al.*, 2010; Spanjol *et al.*, 2011). Existing gaps in the new product sales management literature include the following. First, the current literature has yet to fully characterize how an organization's sales-related psychological climate can moderate salespeople's new product sales performance. It has been suggested that individuals' perceptions regarding organizational support for learning and other contextual aspects may moderate the influence of dispositional goal orientation on performance (Button *et al.*, 1996). Some studies have explored the contextual effects that may affect the relationship between goal orientation and performance (e.g., Martocchio and Hertenstein, 1999; Potosky and Ramakrishna, 2002; Steele-Johnson *et al.*, 2000); however, the contexts are not related to new product sales management. Evans *et al.* (2007) examined the perceived sales-related organizational climate's direct influence on salespeople; nonetheless, the moderating effects of organizations' sales-related psychological climates on salespeople's new product sales performance have not been considered, which limits the ability of

managers to strategically create a positive work environment when promoting new products.

Second, how salespeople are influenced by goal orientation when selling new products needs additional examination. Previous results have not always been consistent regarding the influence of a performance-prove goal orientation (Fu *et al.*, 2009; Silver *et al.*, 2006). For instance, some researchers found it has a positive effect on salespeople (e.g., Potosky and Ramakrishna, 2002; Silver *et al.*, 2006), while others found this relationship to be insignificant (e.g., VandeWalle *et al.*, 2001). In addition, when studying employees' performance, some scholars used the contemporary model of goal orientation, which only consists of the learning goal orientation and the performance-prove goal orientation (Potosky and Ramakrishna, 2002; VandeWalle *et al.*, 1999). Silver *et al.* (2006) argued that the classic model, which consists of the learning goal orientation, the performance-prove goal orientation, and the performance-avoid goal orientation, captures salespeople's behavior more comprehensively.

Third, more research into the mediating role of self-efficacy is needed. Self-efficacy can be defined as individuals' confidence in their ability to overcome the challenges that they encounter (Bandura, 1997; Wood and Bandura, 1989). Silver *et al.* (2006) advise scholars to examine how self-efficacy can mediate the relationship between goal orientation and sales performance. In later research, Fu *et al.* (2009) confirmed that self-efficacy can affect salespeople's new product sales performance; however, they did not examine goal orientation's influence on self-efficacy. For this reason, a further examination of the mediating effects from new product selling self-efficacy can benefit from additional research.

New product development is an expensive and time-consuming process that suffers from a high failure rate (Jonash and Sommerlatte, 1999; Krishnan and Zhu,

2006). However, introducing innovative new products is a critical factor in the success of some modern corporations (Jonash and Sommerlatte, 1999; Krishnan and Zhu, 2006). According to Kim and Atuahene-Gima (2010), successful new products can improve brand/corporate images, create market entry barriers, attract new talent, and increase revenue and profit. In a recent industry report published by McKinsey & Company, Batra and Kaza (2012) argued that electronics companies that manufacture and sell computer components (e.g., semiconductors) could grow their businesses significantly if their sales forces became more effective. For this reason, a rigorous rethinking of sales and marketing processes, especially the management of the sales team, is urgently needed to explore opportunities.

To narrow the gaps in the aforementioned literature, the present study has the following objectives. First, this study attempts to show how the perceived psychological climates of organizations (i.e., sales supportiveness, sales innovativeness, and customer orientation) may affect salespeople's performance when selling new products. Second, drawing on the literature on goal orientation, this study proposes and empirically examines how different types of goal orientation affect salespeople's self-efficacy when selling new products. Third, this study tests how new product selling self-efficacy mediates the relationships between goal orientations and new product sales performance. Finally, taking into account information obtained from practitioners who work in high-technology firms, this paper discusses the strategic implications of the research.

Overarching Theory— Goal Orientation Theory, Organizational Psychological Climate Perception, and New Product Sales Management

Goal orientation theory and NP sales management

Goal orientation theory is rooted in the fields of psychology and education but is gradually being applied to the field of management, including sales team management.

This theory can be useful for examining the performance of salespeople because it addresses the ways in which individuals approach and react to new information or knowledge (e.g., selling new products or encountering new information at school) (Kohli *et al.*, 1998; Mehta *et al.*, 2008; VandeWalle *et al.*, 1999; 2001). In earlier research, goal orientation is defined as a disposition toward developing or demonstrating ability in achievement situations (Dweck, 1986). Subsequently, scholars confirmed that it has three distinct dimensions: learning goal orientation, performance-prove goal orientation, and performance-avoid goal orientation (Mehta *et al.*, 2009).

In achievement situations, a learning goal orientation involves an individual's focus on developing his or her competence by acquiring new skills, mastering new situations, and learning from experience (VandeWalle, 1997). Individuals with a performance-prove goal orientation emphasize demonstrating their capabilities and gaining favorable evaluations from others, such as managers or lecturers (Vandewalle *et al.*, 2001; Steele-Johnson *et al.*, 2000). Lastly, VandeWalle *et al.* (2001) define the performance-avoid goal orientation as a focus on avoiding the appearance of incompetence and negative evaluations from others. Scholars generally agreed that goal orientation can serve as a predictor of individuals' performance in situations such as selling products or completing assignments (e.g., Button *et al.*, 1996; Mehta *et al.*, 2008; Potosky and Ramakrishna, 2002; Silver *et al.*, 2006; VandeWalle *et al.*, 2001).

Goal orientation can exist as a relatively stable individual disposition toward a preference that will be affected by a situational cue (Bell and Kozlowski, 2001; Button *et al.*, 1996; VandeWalle, 1997; VandeWalle *et al.*, 2001). Scholars who studied sales and salespeople have primarily focused on an individual's goal orientation as a disposition unless the study focuses on the influences of situational cues (e.g., Mehta *et al.*, 2009; Silver *et al.*, 2006; VandeWalle *et al.*, 1999; 2001).

Additionally, when examining how goal orientations can affect employees' self-efficacy, scholars (Gong *et al.*, 2009; Potosky and Ramakrishna, 2002) have used goal orientations as personality trait-like constructs.

In terms of goal orientation's influences, scholars have shown that it can positively affect individual's learning self-efficacy (Potosky and Ramakrishna, 2002) and creative self-efficacy (Gong *et al.* 2009). Furthermore, self-efficacy can mediate the relationship between goal orientation and performance (Kanfer, 1987; Potosky and Ramakrishna, 2002; Steele-Johnson *et al.*, 2000; VandeWalle *et al.*, 2001). Goal orientations' influence on individuals has been studied (e.g., Potosky and Ramakrishna, 2002; Silver *et al.*, 2006; VandeWalle *et al.*, 1999; VandeWalle *et al.*, 2001); nevertheless, opportunities for future research exist. First, previous results have not always been consistent regarding performance-prove goal orientation's influence (Fu *et al.*, 2009; Silver *et al.*, 2006). Second, the influence of performance-avoid goal orientation on salespeople needs further investigation (Potosky and Ramakrishna, 2002; Silver *et al.*, 2006; VandeWalle *et al.*, 1999; 2001). Third, more research into self-efficacy's mediating role is needed (Silver *et al.*, 2006). Last, because Potosky and Ramakrishna's (2002) study included only one IT company, research that includes multiple companies may further advance existing knowledge relating to goal orientation and sales management.

Perceived organizational psychological climate in sales settings

Previous research results have shown that employees' performance may be affected by an organization's psychological climate perceptions (Bradley *et al.*, 2012; Baer and Frese, 2003; Potosky and Ramakrishna, 2002). The psychological climate can be defined as a set of attributes specific to a particular organization that are assumed to influence employees' attitudes and behaviors (Day and Bedeian, 1991; Glick, 1985). Several studies have indicated the importance of the organizational

psychological climate. For instance, Potosky and Ramakrishna (2002) note that the climate serves three important functions when applied to a management research context: 1) it permits the investigation of complex social (e.g., work) situations; 2) it simplifies the challenges associated with measuring situational determinants; and 3) it serves as a medium through which members can better understand their environments.

Although some aspects of organizational psychological climate perceptions have been examined (e.g., Bradley *et al.*, 2012; Baer and Frese, 2003; Evans *et al.*, 2007; Potosky and Ramakrishna, 2002), the current sales management literature has not yet investigated the moderating effect of different sales-related organizational psychological climate perceptions on salespeople's new product sales performance. The aforementioned scholars have recommended additional research regarding organizational psychological climate's moderating effects because many organizational psychological climate variables are situation dependent.

An organization that expects salespeople to be good at selling needs to provide an appropriate perceived climate (Baldauf *et al.*, 2005). To identify factors in the organizational psychological climate that might interact with salespeople's new product selling self-efficacy, this research adapts Evans *et al.*'s organizational sales-related psychological climate perceptions (OSPCPs). According to Evans *et al.* (2007), sales supportiveness, sales innovativeness, and customer orientation are three OSPCPs that are particularly relevant when examining salespeople's performance. These climate perceptions reflect the selling efforts a company invests in its customers and, in turn, the company's commitment to making their salespeople effective in their role (Evans *et al.*, 2007). Evans *et al.* (2007) explored different sales-related climates' direct effects on sales performance but not their moderating effects.

For Donovan *et al.* (2004), customer orientation in the sales management context

can be defined as the tendency or predisposition of salespeople to meet their customers' needs. Sales supportiveness can be defined as salespeople's perception of whether their organization cares for their well-being and appreciates their efforts (Evans *et al.*, 2007). Lastly, sales innovativeness in the context of sales management can be defined as an organization's tendency to engage in and support new ideas, try new methods, and be creative (Matsuo, 2009). Based on the results from existing studies, this study hypothesizes that sales-related climate perceptions can moderate the relationship between salespeople's self-efficacy and their new product sales performance.

Notably, several other organizational psychological climates have been considered to influence employees' job performance, including a perceived organizational climate for updating (Potosky and Ramakrishna, 2002), psychological safety (Bradley *et al.*, 2012; Baer and Frese, 2003), and initiative (Baer and Frese, 2003). However, climates of psychological safety and initiative have been examined more frequently, and the climate for updating is less relevant to this study's context.

Research Framework and Hypotheses

Theoretical framework of this research

Pursuant to the literature reviewed above and the identified research opportunities, this paper proposes its research framework (Figure 1). In terms of the antecedents of sales performance, this research focuses on the effects of salespeople's self-efficacy when selling new products (Fu *et al.*, 2009; 2010; Potosky and Ramakrishna, 2002; VandeWalle *et al.*, 2001). Moreover, it examines mediators in the relationships between goal orientations and performance (Potosky and Ramakrishna, 2002; VandeWalle *et al.*, 2001).

Scholars have suggested that self-efficacy is a significant factor when examining salespeople's performance (e.g., Bell and Kozlowski, 2002; Fu *et al.*, 2010; Potosky

and Ramakrishna, 2002; VandeWalle *et al.*, 2001). Self-efficacy when selling new products is the belief in one's ability to access the motivation, cognitive resources, and course of action needed to sell new products (Wood and Bandura, 1989). This belief can be developed through mastery of experience, vicarious experience, social persuasion, and/or physiological and affective states (Bandura, 1997).

First, according to Fu *et al.* (2009; 2010), research has consistently found that self-efficacy is a strong predictor of salespeople's performance; therefore, it is a key variable in this research. This research focuses on the non-financial aspects of salespeople's performance because non-financial data overcome the difficulties associated with asking participants (i.e., salespeople and sales managers) to reveal sensitive information and with comparing different sized firms (Matear *et al.*, 2002). Second, Matsuo (2009) notes that objective measures are highly related to subjective measures. Third, Silver *et al.* (2006) suggest that this focus is a well-accepted approach in the sales survey research, and no evidence of biased responses was apparent. Additionally, through the works of Potosky and Ramakrishna (2002) and VandeWalle *et al.* (2001), this study proposes that goal orientation (i.e., learning goal orientation, performance-prove goal orientation, and performance-avoid goal orientation) will affect salespeople's self-efficacy when selling new products.

In Bell and Kozlowski's (2002) view, goal orientation is important when researching employee performance because it differentiates individuals based on how they respond to difficult tasks. In previous research, scholars (e.g., Potosky and Ramakrishna, 2002; Silver *et al.*, 2006; VandeWalle *et al.*, 2001) generally agreed that goal orientation can serve as a predictor of employees' self-efficacy and/or behavior.

This study uses the classic model, which includes the performance-prove goal orientation, the performance-avoid goal orientation, and the learning goal orientation, rather than the contemporary model, which only includes the performance-prove goal

orientation and the learning goal orientation. Additionally, it examines self-efficacy's influences on job performance. This study focuses on new product selling self-efficacy and new product sales performance. When examining this research's proposed framework, its ability to mediate the relationships between goal orientations and new product sales performance will also be investigated.

Finally, this study investigates the moderating effects of perceived psychological climates on sales performance, following the studies of Baldauf *et al.* (2005), Day and Bedeian (1991), Evans *et al.* (2007), and Potosky and Ramakrishna (2002). Based on the work by Evans *et al.* (2007), the three important sales-related psychological climates are sales supportiveness, sales innovativeness, and customer orientation. Although these climate perception variables are important, their influence on salespeople can be explored further—for example, with respect to their ability to moderate salespeople's new product sales performance. As suggested by Baldauf *et al.* (2005), scholars have been examining how organizational climate variables affect sales performance. Nevertheless, additional research is still needed because the moderating effects of the variables related to organizational sales-related psychological climate perception have not been investigated. Although Evans *et al.* suggested that these three factors comprise organizational sales-related psychological climate, they did not use them as lower order sub-dimensions of organizational sales-related psychological climate perceptions in their framework and analysis.

*Figure 1 here

Relationships between goal orientation and self-efficacy when selling new products

According to research by Ames (1992) and Elliot and Church (1997), salespeople can have one of the following three goal orientations when selling: a learning goal orientation, a performance-prove goal orientation, or a performance-avoid goal orientation. Previous studies (e.g., Potosky and Ramakrishna, 2002; VandeWalle *et al.*,

2001) have found that these orientations are linked to students' and/or employees' self-efficacy when performing their duties. Efficacy has been applied to multiple research contexts that are challenging and require some level of experience, such as selling new technology products in a B2B context (e.g., Fu *et al.*, 2009), performing job-related tasks in the IT industry (Potosky and Ramakrishna, 2002), exercising for fibromyalgia syndrome patients (Loucks-Atkinson and Mannell, 2007), and participating in serious leisure activities (White, 2008). In the context of the current research, self-efficacy refers to salespeople's beliefs in their ability to sell new products.

The first type of goal orientation that can influence salespeople's new product selling self-efficacy is the learning goal orientation. Based on VandeWalle's (1997) definition, a learning goal orientation in this research context involves a salesperson's focus on developing his or her competence by acquiring new skills, mastering new situations, and learning from experience when selling new products. Furthermore, Gong *et al.* (2009) have noted that this orientation is an internal mindset that motivates individuals to develop their competences. Studies by Park and Holloway (2003) and Sujan *et al.* (1994) have confirmed that salespeople with a high degree of learning goal orientation are eager to learn how to sharpen their skills and are willing to try different strategies to overcome obstacles. Potosky and Ramakrishna (2002) and VandeWalle *et al.* (2001) have shown that a learning goal orientation will directly influence a salesperson's self-efficacy when performing his/her duties.

For the current research, the learning goal orientation is likely to influence a salesperson's self-efficacy when performing his duties because new products have features that are different from existing products; those who are eager to learn about new features and to form appropriate sales pitches for potential customers are likely to have stronger beliefs about their ability to effectively promote new products to

potential customers. This influence stems from the learning goal orientation's function as an internal driver for the mastery of skills. Individuals with this orientation see challenges as an opportunity to learn (Gong *et al.*, 2009). Based on the literature cited above and the observation that salespeople may need to learn about the characteristics of new products before they can effectively promote them to potential customers, this study hypothesizes that salespeople who have a learning goal orientation will have stronger self-efficacy in terms of selling new products.

H1: There will be a positive relationship between the learning goal orientation and the level of new product selling self-efficacy.

The second type of goal orientation is the performance-prove goal orientation. According to VandeWalle *et al.* (2001), VandeWalle (1997), Silver *et al.* (2006), and Steele-Johnson *et al.* (2000), the primary focus of salespeople with this personality trait is to demonstrate their capabilities and gain favorable evaluations from others (e.g., managers and lecturers) when given a task. Steele-Johnson *et al.* (2000) and Potosky and Ramakrishna (2002) both proposed a positive relationship between performance-prove goal orientation and self-efficacy. In other words, students and employees who have performance-prove goal orientations should have stronger beliefs regarding their capabilities because they tend to seek situations that could show off their capabilities or cause them to receive positive evaluations. Based on Silver *et al.*'s (2006) and VandeWalle *et al.*'s (2001) research, self-efficacy can be developed through external factors, such as positive feedback from others.

This study hypothesizes that salespeople who are eager to demonstrate their capabilities and gain favorable evaluations from their managers are likely to have strong confidence regarding their ability to promote new products. This hypothesis is based on the characteristics of performance-prove goal-oriented individuals (Silver *et al.*, 2006; Steele-Johnson *et al.*, 2000; VandeWalle *et al.*, 2001) and the attention that

new products often attract from managers (Ahearne *et al.*, 2010; Baldauf *et al.*, 2005; Bonner *et al.*, 2002). For salespeople who want to be favorably evaluated for selling new products, it is logical to suggest that they have the strong belief that they can do this task well. After considering previous scholars' hypotheses, results, and research contexts, this research tests the following hypothesis:

H2: There will be a positive relationship between the performance-prove goal orientation and levels of new product selling self-efficacy.

The third type of goal orientation is the performance-avoid goal orientation. VandeWalle *et al.* (2001) define the performance-avoid goal orientation as a focus on avoiding the appearance of incompetence and negative evaluations from others. In the context of selling new products, this orientation is characterized by a salesperson's emphasis on avoiding having his or her lack of competence exposed and avoiding negative evaluations from others (VandeWalle, 1997).

Hirst *et al.* (2011) found that employees who have a performance-avoid goal orientation are less creative and more conservative in their work because they tend to avoid situations that could potentially expose their weaknesses or cause them to receive negative evaluations. VandeWalle *et al.* (2001) showed that there is a negative relationship between the two variables of performance-avoid goal orientation and self-efficacy. Studies that have examined individual performance-avoid goal-orientedness (e.g., Silver *et al.*, 2006; VandeWalle *et al.*, 2001) reveal that these individuals are not especially interested in learning new skills or in obtaining positive evaluations.

As stated earlier, new products often attract attention from managers and often have unfamiliar features and high failure rates (Ahearne *et al.*, 2010; Baldauf *et al.*, 2005; Bonner *et al.*, 2002; Fu *et al.*, 2010; Krishnan and Zhu, 2006). Salespeople who strongly want to hide their incompetence when selling new products are likely to

believe that they cannot do this task well. Based on VandeWalle *et al.*'s (2001) research and because new products often have unfamiliar features and a high failure rate (Fu *et al.*, 2010; Krishnan and Zhu, 2006), this research hypothesizes that salespeople who have a performance-avoid goal orientation will have lower new product selling self-efficacy in terms of promoting new products.

H3: There will be a negative relationship between the performance-avoid orientation and levels of new product selling self-efficacy.

Relationship between new product selling self-efficacy and sales performance

Among the variables that can be influenced by salespeople's self-efficacy, sales performance has received some attention (e.g., Cravens *et al.*, 1993; Fu *et al.*, 2009; 2010; Miao and Evan, 2012; 2013; Oliver and Anderson, 1995; Piercy *et al.*, 2009; Potosky and Ramakrishna, 2002; VandeWalle *et al.*, 2001). According to Grant and Cravens (1996), sales performance is defined as an evaluation of the salesperson's behavior based on how he/she contributes to the objectives set by his/her organization. In Flaherty *et al.*'s (2007) and Miao and Evans's (2013) studies, salesperson performance was measured by salespeople's self-perceived achievement in terms of the quality and quantity of sales objectives. In the current study's context, new product sales performance is salespeople's self-perceived achievement measured by how each contributes to the new product sales objectives set by his/her organization.

To measure salesperson performance when selling new products, the current research follows the steps of Evans *et al.* (2007), Miao and Evans (2012; 2013), and Silver *et al.* (2006) by using self-reported, non-financial instruments. As stated earlier, this research focuses on the non-financial aspect of salespeople's performance because non-financial data overcome the difficulties associated with asking participants (e.g., salespeople and sales managers) to reveal sensitive information and the difficulties in comparing different sized firms (Matear *et al.*, 2002). Second,

Matsuo (2009) notes that objective measures are highly related to subjective measures. Third, Silver *et al.* (2006) have suggested that the use of non-financial data is a well-accepted approach in sales survey research, and no evidence of biased responses were apparent. The connection between self-efficacy and sales performance has been previously tested; the findings generally support the contention that self-efficacy positively affects sales performance (e.g., Potosky and Ramakrishna, 2002; VandeWalle *et al.*, 2001). The current study extends existing research findings by focusing on sales performance for new products rather than general sales performance. In addition, because some literature (e.g., Silver *et al.*, 2006) suggests that goal orientations can directly affect performance, self-efficacy's mediating effect will be examined. Based on the aforementioned literature, the current study proposes the following hypothesis:

H4: There will be a positive relationship between levels of new product selling self-efficacy and a salesperson's new product sales performance.

Moderating effects of sales-related organizational psychological climate

Perhaps the most interesting aspect of this research is its inclusion of the three organizational psychological climate variables as moderators for the relationship between self-efficacy and sales performance. This research focuses on salespeople and their perceptions of their organization's psychological climate; therefore, the three organizational sales-related psychological climate variables used by Evans *et al.* (2007) will be the focus: the organization's customer orientation, sales supportiveness, and sales innovativeness.

The first organizational sales-related psychological climate perception variable to be examined in this research is customer orientation. In this study's context, customer orientation is the salespeople's perception of the degree to which their organization promotes and engages in activities that provide quality service and

satisfaction to their customers (Evans *et al.*, 2007). Organizations that have a customer-oriented climate should be able to make their salespeople more effective at selling new products because these organizations have customer satisfaction and creating value for customers in mind when developing new products. Salespeople can communicate new products' benefits to potential clients based on the clients' perspective with relative ease (Faramillo *et al.*, 2007).

When salespeople perceive their organization to be highly customer-oriented, e.g., knowing what customers want and need before, during, and after transactions, their belief regarding their ability to sell new products will likely have a greater effect on their sales performance. This is because salespeople may have the perception that the task of selling new products is made easier because their organization understands the types of new products needed by customers. However, salespeople's belief regarding their ability to sell new products will likely have a lesser effect on their sales performance if they perceive that their organization has insufficient knowledge about customers and / or the new products that they are selling are not needed by customers. Research has shown that bank employees' feelings of inefficacy will have a lesser impact on their job performance if they perceive their organization to be highly customer-oriented (Babakus *et al.*, 2009; Babakus and Yavas, 2012). This study proposes the following hypothesis:

H5: Salespeople's new product selling self-efficacy has a more positive effect on sales performance when the organization's customer orientation climate is perceived to be strong.

The second type of sales-related psychological climate variable is sales supportiveness (Evans *et al.*, 2007). An organization can be described as supporting their salespeople when it cares for their well-being, is willing to extend itself to help them, and appreciates their contributions (Evans *et al.*, 2007; Wayne *et al.*, 1997). An

organization that is perceived to be supportive of its salesforce can make its salespeople better at selling new products because they will receive help at the professional and personal levels when they request it (Wayne, *et al.*, 1997).

When salespeople perceive their organization to be supportive, e.g., know that they will receive assistance in a timely and effective fashion, their belief in their ability to sell new products will likely have a greater effect on their sales performance. When selling new products, there is uncertainty and risk (Jonash and Sommerlatte, 1999; Krishnan and Zhu, 2006). Salespeople may perceive that the task of selling new products will become less uncertain if their organization supports them. However, as perceived sales supportiveness decreases, their belief in their ability to sell may have a weaker impact on their new product sales performance because they will worry that they will not be appreciated for their work and / or will not receive the necessary resources to sell new products well. In Potosky and Ramakrishna's (2002) study, an updating climate moderates employees' self-efficacy and job performance. Part of this climate includes supervisors' and managements' support. This study examines the following hypothesis:

H6: Salespeople's new product selling self-efficacy has a more positive effect on sales performance when the organization's sales supportiveness climate is perceived to be strong.

Finally, the third type of sales-related psychological climate variable is sales innovativeness (Evans *et al.*, 2007). In a sales setting, sales innovativeness is a reflection of the extent to which salespeople perceive their organization as being flexible and their willingness to consider new approaches to problem solving (Evans *et al.*, 2007; Strutton *et al.* 1993). An organization that is considered to be innovative in sales methods and approaches might be able to stimulate their salespeople to be better at selling new products. Salespeople may need to try new methods from time to

time to acquire new clients and to retain existing customers; competition between sellers is usually intense in a B2B selling context, and new products may have new features that potential customers are not aware of (Johnston and Lewin, 1996).

Salespeople's belief about their ability to sell new products will likely have a greater effect on their sales performance if their organization is perceived to be innovative in sales practices and management, for example, encouraging new approaches to selling products and being creative when selling new products. For instance, a salesperson may feel able to be more flexible when approaching clients and when matching / exceeding competitors' offers. However, salespeople's self-efficacy is likely to have a weaker impact on their new product sales performance when their organization is not innovative in sales practices. In this case, salespeople may feel constrained when competing if they perceive their organization to be reluctant to try new selling methods and or regressive in sales practices. In studies involving selling new products (e.g., Bonner *et al.*, 2002; Evans *et al.*, 2007; Robinson Jr. *et al.*, 2005), innovativeness at the organizational level has been considered to be an influential factor insofar as the promotion of new products may require new approaches and methods. This research examines the following hypothesis:

H7: Salespeople's new product selling self-efficacy has a more positive effect on sales performance when an organization's sales innovativeness climate is perceived to be strong.

Methodology

Sampling and data collection

To examine this study's proposed framework, data were collected using procedures similar to those of Ahearne *et al.* (2010), Cravens *et al.* (1993), and Fu *et al.* (2010). The companies involved in this study were electronic product

manufacturers publicly listed on the Taiwan Stock Exchange. The study focused on electronic products because this sector is characterized by rapid product innovation and because the competition between firms in this market is intense (Tellis *et al.*, 2009; Thompson, 2009). After confirming the information provided by the Taiwan Stock Exchange, 669 companies were identified as trading under the electronics industry category. Companies were considered if they had launched new products within the six months preceding the time at which study's researchers made their first contact. In total, 158 companies met this criterion and agreed to participate in this research. EMBA and MBA students were recruited as interviewers to gather data. After representatives of the target firms were contacted to request their company participate by allowing the researchers to access their employees, postal surveys were used to collect data from salespeople who had agreed to participate after an initial contact by email or phone. Before interviewing the salespeople, the researchers explained the purpose of this study to the company's representatives and to each salesperson.

A total of 476 questionnaires were sent to salespeople, and 158 complete responses were obtained after three months. The response rate was 33.2%. Among the respondents who completed the usable questionnaires, 50% of the sales staff members were male, 69.5% of the sales staff members were 30–39 years of age, and 67.7% of the respondents had worked in the sales department for more than four years. Most (65.8%) of the companies that participated in this study had been established for at least 16 years, and many of them (31%) had more than 1,000 full-time employees. Details regarding the survey respondents and the companies that participated in this research can be found in Table 1. To check for non-response bias, the procedure used by Armstrong and Overton (1977) was followed. The results showed that there were no significant differences and, thus, no indication of non-response bias. According to an assessment of normality, the data were not within the acceptable range to be

categorized as normally distributed (Curran *et al.*, 1996); therefore, partial least square (PLS) was appropriate for this study (Henseler *et al.*, 2009; Marcoulides *et al.*, 2009).

*Table 1 about here

Measures

Participants completed a 31-question survey that evaluated the learning goal orientation (four items), the performance-prove goal orientation (four items), the performance-avoid goal orientation (four items), customer orientation (four items), sales supportiveness (four items), sales innovativeness (four items), new product selling self-efficacy (four items), and new product sales performance (three items). These items were drawn from the existing literature (Bandura, 1994; Evans *et al.*, 2007; Flaherty *et al.*, 2007; Miao and Evans, 2013; Sujan *et al.*, 1994; VandeWalle, 1997; White, 2008). The target research question was “What are the determinants of a salesperson’s new product sales performance?” Unless otherwise indicated, a seven-point Likert-type scale was used when designing the items. The items for each variable are presented in Table 2.

*Please insert Table 2 here

Model estimation

This study used PLS to examine the proposed model. First, according to the assessment of normality, the data were not within the acceptable range to be categorized as being normally distributed (Curran *et al.*, 1996); therefore, PLS was suitable for this study (Henseler *et al.*, 2009; Marcoulides *et al.*, 2009). Second, PLS is considered to be appropriate for models with complex relationships (Fornell and Bookstein, 1982), such as the combination of mediating and moderating effects (Perols *et al.*, 2013), ~~again confirming the suitability of PLS for this study.~~ Third, PLS was appropriate for use because this study did not seek comparisons between high and

low psychological climate groups but did examine whether psychological climates have moderating effects (Chin *et al.*, 2003). By following Hair *et al.*'s (2012) recommendation of having 5,000 samples, a bootstrapping procedure was employed to examine the significance of the PLS parameter estimates.

Reliability and validity

All factor loadings on the intended latent variable were significant and greater than 0.7 (Fornell and Larcker, 1981), and the squared-multiple correlations supported the reliability of the items used. Because all constructs had Cronbach's alphas and composite reliabilities higher than the recommended threshold of 0.7 (Hair *et al.*, 2012), construct reliability was supported. Convergent validity was assessed in terms of factor loadings and the average variance extracted (AVE). According to Fornell and Larcker (1981), AVE is the average variance shared between a construct and its measurement. As shown in Table 3, AVE values ranged from 0.67 to 0.90; hence, convergent validity was confirmed (Fornell and Larcker, 1981). Finally, discriminant validity was assessed by comparing the AVE of each individual construct with the shared variances between this individual construct and all other constructs. Because the AVE value for each construct was greater than the squared correlation between constructs, discriminant validity was confirmed.

*Please insert Table 3 here.

Common method bias

This study has checked the common method variance by first using Harman's one-factor test. Unrotated factor analysis generated all factors with eigenvalues greater than one. The first factor accounted for 36.59% of variance (<50%), therefore, indicating that common method bias is unlikely to be a concern in this research (Podsakoff *et al.*, 2003).

The marker variable technique was also used to examine for common method

bias. According to Lindell and Whitney (2001) and Craighead *et al.* (2011), the marker variable technique has performed better than other post hoc statistical techniques. In addition, this technique can be used to correct common method variance. A theoretically unrelated construct (marker variable, MV) was employed to adjust the correlations among the principle constructs. This research used the sales managers' age as a marker variable. Using age as a marker variable in sales management-related research has an established basis (Fernández *et al.*, 2010; Friend *et al.*, 2011 Rapp *et al.*, 2008; 2012). The present research selected the lowest positive correlation ($r=0.002$) between the MV and one of the other variables. Using the equations provided by Menguc and Auh (2010), this study computed the adjusted correlations and their statistical significances (Grayson, 2007).

The intercorrelations among the constructs before and after the MV adjustment are shown in Table 3 (below the diagonal and above the diagonal, respectively). Out of the 28 correlations, this study found that the MV adjustment made no significant correlations nonsignificant and made no nonsignificant correlations significant. Last but not least, the MV was included in the proposed model. These results suggest that the relationships included in this study's model are unlikely to be inflated due to common method bias (Table 4). Given that both analyses indicate no common method bias, this study's results do not appear to be threatened by common method bias.

Results

Structural model

Main effects: The results gathered from examining the proposed hypotheses are presented in Table 4 and Figure 2. H1 was supported ($\beta=0.38$; $t=4.03$); therefore, a stronger learning goal orientation had a positive impact on new product selling self-efficacy. H2 suggested that a performance-prove goal orientation would have a positive influence on new product selling self-efficacy. The result ($\beta=0.36$; $t=4.89$)

shows this relationship to be a positive and significant one. This study's H3 was supported because the performance-avoid goal orientation was shown to have a significantly negative impact on new product selling self-efficacy ($\beta=-0.14$; $t=-1.99$). The results supported hypothesis H4 ($\beta=0.39$; $t=2.84$) and therefore confirmed that new product selling self-efficacy did positively influence sales performance.

Moderating effects: H5 proposed that the customer orientation climate would moderate the relationship between new product selling self-efficacy and new product sales performance. To examine this hypothesis, this study standardized the new product selling self-efficacy and new product sales performance measures and created an interactive term to serve as a latent construct with items that were the product terms of each pair of items. The interaction effect was significant ($\beta=0.41$; $t=1.96$). Therefore, the customer orientation climate did moderate the relationship between self-efficacy and sales performance.

H6 suggested that the sales supportiveness climate would moderate the relationship between new product selling self-efficacy and new product sales performance. By using a procedure identical to that used in the examination of the customer orientation climate's moderating effect, the resultant findings confirmed that self-efficacy had a more positive effect on sales performance when the organization's sales supportiveness climate was significant ($\beta=0.35$; $t=2.07$). Finally, this study proposed that self-efficacy would have a more positive effect on sales performance when an organization's sales innovativeness climate was strong; however, the results gathered from our investigation showed that sales innovativeness did not moderate the relationship between new product selling self-efficacy and new product sales performance. Therefore, H7 could be rejected ($\beta=-0.18$; $t=0.90$). The R^2 value for new product sales performance increased from .259 to 0.370, which suggests a moderate effect.

*Please insert Table 4 here.

*Please insert Figure 2 here.

Predicative relevance of the research model

To measure the predicative relevance of the PLS models, the Stone-Geisser test criterion (Q^2) was used. The results showed that all Q^2 s were positive and indicated a sufficient level of predictive relevance (Fornell and Bookstein, 1982). The Q^2 ranged between 0.31 and 0.83. This study's conceptual model had a goodness-of-fit (GoF) of 0.57, which was considered satisfactory (Hair *et al.*, 2012).

New product selling self-efficacy's mediating effect

Peacher and Hayes's (2008) guidelines were used to examine the mediating effect of new product selling self-efficacy. First, it was found that the goal orientations (i.e., learning goal orientation, performance-prove goal orientation, and performance-avoid goal orientation) were directly associated with new product sales performance. It was also found that the goal orientations were positively related to self-efficacy when selling new products. Lastly, results indicated that the mediator, self-efficacy when selling new products, was positively associated with new product sales performance.

Because the a-paths and b-paths were significant, the mediation analyses were tested using the bootstrapping method with bias-corrected confidence estimates (MacKinnon *et al.*, 2004). In the present study, the 95% confidence interval of the indirect effects was obtained with 5000 bootstrap resamples (Preacher and Hayes, 2008). The results of the mediation analysis confirmed the mediating role of self-efficacy in the relation between goal orientations and new product sales performance. In addition, the results indicated that the direct effect of learning goal orientation and performance-prove goal orientation on new product sales management changed to non-significant when controlling for self-efficacy, thus suggesting full

mediation. The direct effect of the performance-avoid goal orientation on new product sales management remains significant when controlling for self-efficacy, thus suggesting partial mediation. Table 5 summarizes the statistics on the indirect and direct relationships essential for the examination of the mediating effects.

*Table 5 about here

Discussion and Implications

Existing gaps in the new product sales management literature include the following: 1) the moderating effect of organizational psychological climate requires further investigation; 2) goal orientation's influence on salespeople when selling new products needs additional examination because previous results have not been consistent; and 3) more research into self-efficacy's mediating role is needed. The following sections discuss how the current research narrows the gaps in the sales management literature mentioned by the aforementioned scholars.

New product sales performance, new product selling self-efficacy, and goal orientation

In support of the theoretical framework proposed in this study, this research finds that new product selling self-efficacy is positively linked with new product sales performance. This result reconfirms self-efficacy's influence on an individual's workplace performance (e.g., Fu *et al.*, 2009; Potosky and Ramakrishna, 2002; VandeWalle *et al.*, 2001). In this research context, if salespeople believe they have the ability to affect issues that influence their new product sales performance, they are likely to perform better, e.g., by exceeding the new product sales target.

With regard to the effects of goal orientations on new product selling self-efficacy, this study reveals that sales staff members' learning goal orientations are positively linked to their level of efficacy when selling new products. This result aligns with previous scholars' findings (e.g., Potosky and Ramakrishna, 2002; Silver

et al., 2006; Sujan *et al.*, 1994; VandeWalle *et al.*, 1999; 2001). In this study's setting, salespeople who think it is important to learn from experience, continuously improve their selling skills, and learn something new about their customers and products will have a more positive outlook regarding their ability to control issues that influence their efficacy when selling new products. According to Bandura (1997) and White (2008), one method for developing self-efficacy is learning how to master the necessary techniques for a given task. Additionally, this finding also aligns with the phenomenon that new electronic products generally have features that are substantially different than those of previous products; hence, learning is an important component before and during the sale of new products.

Steele-Johnson *et al.* (2000) and Potosky and Ramakrishna (2002) suggest that the relationship between a performance-prove goal orientation and self-efficacy is a positive one because individuals with this goal orientation want to receive positive feedback and appraisals from managers and colleagues. However, only Steele-Johnson *et al.* confirmed their hypothesis. Potosky and Ramakrishna found this relationship to be insignificant when applied to job-related tasks at the workplace. The result of this study aligns with those of Steele-Johnson *et al.* (2000), indicating that a performance-prove goal orientation has a positive and significant impact on self-efficacy. In other words, the salespeople who believe it is important that their supervisors see them as good new product salespeople and who feel good when they outperform their colleagues are more likely to be confident that they can sell new products well.

The adoption of a performance-avoid goal orientation has a negative impact on self-efficacy when selling new products. Potosky and Ramakrishna (2002) and VandeWalle *et al.* (1999) did not examine this factor's influence on employee's efficacy as they were using the contemporary model of goal orientation. Silver *et al.*

(2006) argued that the classic model, which consisted of the learning goal orientation, the performance-prove goal orientation, and the performance-avoid goal orientation, captures salespeople's behavior more accurately. The current research result shows that an avoidance orientation should not be overlooked when examining salespeople's efficacy.

Salespeople with an avoidance orientation (e.g., those who avoid new product selling situations in which they may perform poorly) will not believe that they have sufficient ability to overcome the challenges associated with selling a new product. As stated before, selling new technology products can be a difficult and time-consuming process because these products have features that are new to both the salespeople and the potential customers. Additionally, new products often suffer from high failure rates, and the management team often closely monitors those salespeople selling new products. Selling new products is a situation in which salespeople can easily expose their weaknesses and incompetency; therefore, the relationship between a performance-avoid goal orientation and self-efficacy is significantly negative in the context of this study.

Perceived sales-related organizational psychological climates

To identify which organizational sales-related psychological climate perceptions can benefit organizations when selling new products, the current research examines the ability of customer orientation, sales supportiveness, and sales innovativeness to moderate salespeople's new product selling self-efficacy and new product sales performance. The results of this study show that customer orientation and sales supportiveness moderate salespeople's self-efficacy and sales performance. These three sales-related psychological climate factors were proposed by previous scholars studying sales management, but previous studies have not yet explored and distinguished the moderating effects of different sales-related psychological climate

factors.

The findings show that sales supportiveness can moderate the relationship between new product selling self-efficacy and salespeople's new product sales performance. New products often have new features that need support from management and other departments, such as supervisors who provide psychological support or a market information system department that supplies useful market-/customer-related information. For this reason, organizations that are perceived as having a supportive climate enhance the staff's belief that due to help from the organization, they will perform better because they have greater resources to address the issues associated with selling new products.

These research results also support the hypothesis that customer orientation can moderate the relationship between salespeople's self-efficacy and their new product sales performance. In other words, salespeople's belief about their ability will have a greater impact on their sales performance when they perceive their organization to be customer-oriented, for example, creating value for existing and potential customers based on knowing what they want and need. This positive impact probably occurs because the new products being promoted are likely to have a strong demand.

Customer orientation's ability to moderate the relationship between new product selling self-efficacy and new product sales performance might provide new insights into the current understanding of the effects of organizational sales-related psychology climate variables.

The present study's results do not support the contention that salespeople's belief in their ability will have greater impact on their new product sales performance when they perceive their organizational climate as supporting new sales techniques and methods. Gong *et al.* (2009) found that learning goal-oriented employees' self-efficacy contributes to their creativity, which, in turn, improves their job

performance. It is possible that some of the salespeople who have strong self-efficacy in selling new products are innovative individuals; for this reason, their organization's innovative sales climate cannot further significantly moderate their performance.

It is also possible that the new products in this study are developed through incremental innovation rather than radical innovation. In other words, the new products are the result of step-by-step improvements rather than fundamental changes from existing processes (Engen and Holen, 2014). If this is the case, salespeople may have strong beliefs about their new product selling ability, as they are mostly familiar with these new products; therefore, an innovative sales climate at the organizational level cannot further moderate the relationship between salespeople's self-efficacy and their new product sales performance. As one of the first studies to examine sales innovativeness's moderating effect, this current research further contributes to the understanding of this sales-related psychological climate variable. Sales innovativeness is not a key sales-related climate variable when the focus is on its ability to moderate salespeople's new product selling self-efficacy and their sales performance.

Based on the above discussion, this study's findings may shed some new light on the relevant studies addressing the climate of innovation. Nonetheless, it should be noted that, due to the limited resources available, the discussion on climate's moderating effects provide an initial explanation of the results and may require further investigation in the future.

Managerial implications

Promoting new products in a B2B context can be a challenge for organizations and managers. Not only it is costly and resource consuming, but the competition can also be intense. Additionally, the global economic crisis that began in 2008 further influenced corporate performance and has made lenders more vigilant regarding new

product-related expenditures (Chau *et al.*, 2012; Paunov, 2012). The current study indicates that there are three strategic and managerial implications that may be useful to the sales/product managers responsible for selling new technology products. First, based on this study's results and the previous sales management literature, assigning staff who are eager to learn about new products and who want to sharpen their selling skills will be most appropriate when selling new products because these staff members will have high new product selling self-efficacy, which, in turn, will positively affect their sales performance.

Second, this study's findings suggest that managers should consider employing a performance-prove goal-oriented staff to sell new products. These salespeople demonstrate high self-efficacy; hence, when selling new products, they are likely to have higher sales performance. To manage these staff, sales or product managers need to let salespeople know that selling new products is an opportunity to outperform their colleagues, demonstrate their salesmanship, and earn positive feedback, as management will observe their progress closely. Although there are advantages to using staff of this type, supervisors should expect that these individuals will require more management effort than learning goal-oriented staff because performance-prove goal-oriented staff need more managerial oversight. In addition, managers will need to ensure that the competition between staff is positive and that performance-prove goal-oriented staff do not undermine other colleagues' work to gain positive feedback. To identify staff based on these two goal orientations, managers need to rely on their experience, observations, and assistance from a human resources department.

Third, apart from identifying sales staff goal orientations, managers can improve new product sales performance by managing an organization's perceived psychological climate. The results of this study demonstrated that sales supportiveness and customer orientation enabled positive moderation of the

relationship between new product selling self-efficacy and sales performance. Based on this research, there are several potentially effective methods for improving the sales team's morale. For instance, managers could be attentive to salespeople's opinions, values, and career development. Additionally, managers could provide support by assisting the team in obtaining needed resources from other departments. Finally, management needs to let salespeople know that they are doing their best to understand what new products existing and potential customers will need in the near future. Strengthening research capability through enhancing the existing research and development department or acquiring well-established research teams may give salespeople additional reassurances. With the key findings discussed, the next section will present the conclusions and limitations of the current study as well as discuss possible ways of improving upon this research.

Limitations, future studies, and conclusion

In conclusion, salespeople from Taiwanese electronic goods companies were studied for their new-product-selling behaviors in a B2B context. This study found that the learning goal orientation and the performance-prove goal orientation positively affect salespeople's self-efficacy to sell new products, whereas a performance-avoid goal orientation negatively affects efficacy. In addition, new product selling self-efficacy itself has a positive influence on new product sales performance. As for the moderator, only sales supportiveness and customer orientation have the ability to moderate the relationship between self-efficacy and performance.

Although this research contributes to the existing sales management literature, it also has several limitations. First, this study only considered self-reported, non-financial measurements when examining salesperson performance. Future studies could consider using both financial and non-financial items when examining

salesperson's performance. By using data such as units sold and revenue generated, scholars may reveal new insights into the relationship between self-efficacy and sales performance. Second, future studies may want to explore why sales innovativeness cannot moderate salespeople's performance. Furthermore, scholars may want to explore whether other organization climate variables can moderate salespeople's performance or if other variables can affect goal orientations directly. Third, this study only investigated one industry sector within a single country. Future scholars should apply this research framework to other industries and/or non-Western countries. Fourth, this study did not take managers' points of view into consideration. Future scholars may want to collect multi-source and multi-level data by including both salespeople and their managers to have a more holistic view regarding salespeople's new-product-sales performance. Finally, future studies may want to explore if there are other behavioral constructs, such as organizational commitment and creative behavior, that might mediate between self-efficacy and sales performance, such as the number of times salespeople approach potential clients when selling new products. Alternatively, further investigation into self-efficacy's influences, such as its direct effect on goal orientation and its moderating effect on the relationships between goal orientation and sales performance, will advance the existing sales management literature.

References

- Ahearne, M., Rapp, A., Hughes, D.E. and Jindal, R. (2010), "Managing sales force product perceptions and control systems in the success of new product introductions", *Journal of Marketing Research*, Vol. 47, No.4, pp.764-76.
- Ames, C. (1992), "Classroom: Goals, structures, and student motivation", *Journal of Educational Psychology*, Vol.84, No.3, pp.261-271.
- Armstrong, S. J. and Overton, T.S. (1977), "Estimating non-response bias in mail surveys". *Journal of Marketing Research*, Vol.14, pp.396-402.
- Babakus, E., Yavas, U. and Ashill, N. (2009). "Customer orientation of frontline employees and job burnout", *Journal of Retailing*, Vol.85, No.4, pp.480-492.
- Babakus, E. and Yavas, U. (2012), "Customer orientations as a buffer against job burnout", *Service Industries Journal*, Vol.32, No.1, pp.5-16.
- Baer, M. and Frese, M. (2003), "Innovation is not enough: climates for initiative and psychological safety, process innovations, and firm performance", *Journal of Organizational Behavior*, Vol.24, pp.45-68.
- Baldauf, A., Cravens, D.W. and Piercy, N.F. (2005), "Sales management control research –synthesis and an agenda for future research", *Journal of Personal Selling & Sales Management*, Vol.25, No.1, pp.7-26.
- Bandura, A. (1997), *Self-efficacy: The exercise of control*. New York: W.H. Freeman.
- Batra, G. and Kaza, S. (2012), "Unlocking sales-force potential in the semiconductor industry", *McKinsey on Semiconductors*, Vol. Autumn, No.2, pp.66-75.
- Bell, B. S. and Kozlowski, S.W.J. (2002), "Goal orientation and ability: interactive effects on self-efficacy, performance, and knowledge", *Journal of Applied Psychology*, Vol.87, No.3, pp.497-505.
- Bonner, J.M., Ruekert, R.W. and Walker, Jr, O.C. (2002), "Upper management control of new product development projects and project performances", *Journal of Product Innovation Management*, Vol.19, No.3, pp.233-245.
- Bradley, B.H., Postlethwaite, B.E. and Klotz, A.C. (2012), "Reaping the benefits of task conflict in teams: The critical role of team psychological safety climate", *Journal of Applied Psychology*, Vol.97, No.1, pp.151-158.
- Button, S.B. and Mathieu, J.E. (1996), "Goal orientation in organizational research: A conceptual and empirical foundation", *Organizational Behavior and Human Decision Processes*, Vol.67, No.1. pp.26-48.
- Chau, V. S., Thomas, H., Clegg, S. and Leung, A.S.M. (2012), "Managing performance in global crisis", *British Journal of Management*, Vol.23, pp.S1-S5.
- Chin. W.W., Marcolin, B.L. and Newsted, P.N. (2003), "A partial least squares latent variable modelling approach for measuring interaction effects: Results from a monte carlo simulation study and an electronic-email emotion / adoption study",

- Information Systems Research*, Vol.14, No.2, pp.189-217.
- Craighead, C.W., Ketchen Jr., D.J., Dunn, K.S. and Hult, G.T.M. (2011), "Addressing common method variance: Guidelines for survey research on information technology, operations, and supply chain management", *IEEE Transactions on Engineering Management*, Vol.58, No.3, pp.578-588.
- Cravens, D.W., Ingram, T.N., LaForge, R.W. and Young, C.E. (1993), "Behavior-based and outcome-based salesforce control systems", *Journal of Marketing*, Vol.57, No.4, pp.47-59.
- Curran, P.J., West, S.G. and Finch, J.F. (1996), "The robustness of test statistics to nonnormality and specification error in confirmatory factor analysis", *Psychological Methods*, Vol.1, No.1, pp.16-29.
- Day, D.V. and Bedeian, A.G. (1991), "Predicting job performance across organizations: The interaction of work orientation and psychological climate", *Journal of Management*, Vol.17, pp.589-600.
- Donovan, D.T., Brown, T.J. and Mowen, J.C. (2004), "Internal benefits of service-worker customer orientation: job satisfaction, commitment, and organizational citizenship behaviours", *Journal of Marketing*, Vol.68, No.1, pp.128-146.
- Dweck, C.S. (1986), "Motivational processes affecting learning", *American Psychologist*, Vol.41, pp.1040-1048.
- Elliot, A.J. and Church, M.A. (1997), "A hierarchical model of approach and avoidance motivation", *Journal of Personality and Social Psychology*, Vol.72, pp.218-232.
- Evans, K.R., Landry, T.D., Li, P. and Zou, S. (2007), "How sales controls affect job-related outcomes: The role of organizational sales-related psychological climate perceptions", *Journal of Academy of Marketing Science*, Vol.35, pp.445-459.
- Fernández, P., Río, M.L.D., Varela, J. and Bande, B. (2010), "Relationships among functional units and new product performance: The moderating effect of technological turbulence", *Technovation*, Vol.30, pp.310-321.
- Flaherty, K.E., Arnold, T.J. and Hunt, C.S. (2007), "The influence of the selling situation on the effectiveness of control: toward a holistic perspective", *Journal of Personal Selling and Sales Management*, Vol.XXVII, No.3, pp.221-233.
- Fornell, C. and Bookstein, F.L. (1982), "Two structural equation models: LISREL and PLS applied to consumer exit-voice theory", *Journal of Marketing Research*, Vol.19, No.4, pp.440-452.
- Fornell, C. and Larcker, D. (1981), "Evaluating structural equation models with unobservable variables and measurement errors", *Journal of Marketing Research*,

Vol.18, No.3, pp.39-50.

- Friend, S.B., Hamwi, G.A. and Rutherford, B.N. (2011), Buyer-seller relationships within a multisource context: Understanding customer defection and available alternative”, *Journal of Personal Selling and Sales Management*, Vol.31, No.4, pp.383-395.
- Fu, F.Q., Richards, K.A., Hughes, D.E. and Jones, E. (2010), “Motivating salespeople to sell new products: The relative influence of attitudes, subjective norm, and self-efficacy”, *Journal of Marketing*, Vol.74, No.6, pp.61-76.
- Fu, F.Q., Richards, K. and Jones, E. (2009), “The motivation hub: Effects of goal setting and self-efficacy on effort and new product sales”, *Journal of Personal Selling and Sales Management*, Vol.29, No.3, pp.277-292.
- Glick, W.H. (1985), “Conceptualizing and measuring organizational and psychological climate: pitfall in multilevel research”, *Academy of Management Review*, Vol.10, No.3, pp.601–616.
- Gong, Y., Huang, J.C. and Farh, J.L. (2009), “Employee learning orientation, transformational leadership, and employee creativity: The mediating role of employee creative self-efficacy”, *Academy of Management Journal*, Vol.52, pp.765-778.
- Grant, K. and Cravens, D.W. (1996), “Examining sales force performance in organizations that use behaviour-based sales management processes”, *Industrial Marketing Management*, Vol.25, No.5, pp.361-371.
- Grayson, K. (2007), “Friendship versus business in marketing relationships”, *Journal of Marketing*, Vol.71, No. October, pp.121-139.
- Hair, J.F., Sarstedt, M., Ringle, C.M. and Mena, J.A. (2012), “An assessment of the use of Partial Least Squares Structural Equation Modeling in marketing research”, *Journal of the Academy of Marketing Science*, Vol.40, No.3, pp.414-433.
- Henseler, J., Ringle, C.M. and Sinkovics, R.R. (2009), “The use of partial least squares path modelling in international marketing”, *Advances in International Marketing*, Vol.20, pp.277-319.
- Hirst, G., Knippenberg, D.V., Chen, C-h. and Sacramento, C.A. (2011), “How does bureaucracy impact individual creativity? A cross-level investigation of team contextual influences on goal orientation-creativity relationships”, *Academy of Management Journal*, Vol.54, No.3, pp.624-641.
- Jaramillo, F., Ladik, D., Marshall, G.W. and Mulki, J.P. (2007), “A meta-analysis of the relationship between sales orientation-customer orientation (SOCO) and salesperson job performance”, *Journal of Business and Industrial Marketing*, Vol.22, No.5, pp.302-11.

- Johnston, W.J. and Lewin, J.E. (1996), "Organizational buying behavior: Toward an integrative framework", *Journal of Business Research*, Vol.35, No.1, pp.1-15.
- Jonash, R. and Sommerlatte, T. (1999), *The Innovation Premium Reading*. MA, USA: Perseus Books.
- Kanfer, R. (1987), "Task-Specific Motivation: An Integrative Approach to Issues of Measurement, Mechanisms, Processes, and Determinants", *Journal of Social and Clinical Psychology*, Vol.5, No.2, pp.237-264.
- Kim, N. and Atuahene-Gima, K. (2010), "Using exploratory and exploitative market learning for new product development", *Journal of Product Innovation Management*, Vol.27, No.4, pp.519-536.
- Kohli, A.K., Shervani, T.A. and Challagalla, G.N. (1998), "Learning and performance orientation of salespeople: The role of supervisor", *Journal of Marketing Research*, Vol.35, No.2, pp.263-274.
- Krishnan, V. and Zhu, W. (2006), "Designing a family of development-intensive product", *Management Science*, Vol.52, No.6, pp.813-825.
- Lindell, M.K. and Whitney, D.J. (2001), "Accounting for common method variance in cross-sectional research designs", *Journal of Applied Psychology*, Vol.86, No.1, pp.114-121.
- Loucks-Atkinson, A. and Mannell, R.C. (2007), "The role of self-efficacy in the constraints negotiation process: The case of individuals with Fibromyalgia syndrome", *Leisure Sciences*, Vol.29, No.1, pp.19-36.
- MacKinnon, D.P., Lockwood, C.M., and Williams, J. (2004), "Confidence limits for the indirect effect: Distribution of the product and resampling methods", *Multivariate Behavioral Research*, Vol. 39, No.1, pp.99-128.
- Marcoulides, G.A, Chin, W. and Saunders, C. (2009), "Foreword: A critical look at partial least squares modelling", *MIS Quarterly*, Vol.33, No. 1, pp.171-175.
- Martocchio, J.J., & Hertenstein, E.J. (2003), "Learning orientation and goal orientation context: Relationships with cognitive and affective learning outcomes", *Human Resource Development Quarterly*, Vol.14, No.4., pp.413-434.
- Matear, S., Osborne, P., Garrett, T. and Gray, B.J. (2002), "How does market orientation contribute to service firm performance?", *European Journal of Marketing*, Vol.36, No. 9/10, pp.1068-1075.
- Matsuo, M. (2009), "The influence of sales management control on innovativeness of sales departments", *Journal of Personal Selling and Sales Management*, Vol.XXIX, No.4, pp.321-331.
- Menguc, B. and Auh, S. (2010), "Development and return on execution of product innovation capabilities: The role of organizational structure", *Industrial Marketing Management*, Vol.39, No.5, pp.820-831.

- Miao, C.F. and Evans, K.R. (2013), "The interactive effects of sales control on salesperson performance: a job-demands-resources perspective", *Journal of the Academy of Marketing Science*, Vol.41, No.1, pp.73-90.
- Miao, C.F. and Evans, K.R. (2012), "Formal sales control systems: A combinatorial perspective", *International Journal of Research in Marketing*, Vol.29, No.2, pp.181-191.
- Mehta, A. Field, H.S., Armenakis, A.A. and Mehta, N. (2009), "Team goal orientation and team performance: The mediation of team planning", *Journal of Management*, Vol.35, No.4, pp.1026-1046.
- Oliver, R. and Anderson, E. (1994), "An empirical test of the consequences of behavior-and outcome-based sales control systems", *Journal of Marketing*, Vol.58, pp.53-67.
- Park, J-E. and Holloway, B.B. (2003), "Adaptive selling behaviour revisited: An empirical examination of learning orientation, sales performance, and job satisfaction", *Journal of Personal Selling and Sales Management*, Vol.23, No.3 pp.239-251.
- Paunov, C. (2012), "The global crisis and firms' investments in innovation", *Research Policy*, Vol.41, pp.24-35.
- Pereols, J., Zimmermann, C. and Kortmann, S. (2013), "On the relationship between supplier integration and time-to-market", *Journal of Operations Management*, Vol.31, No.3, pp.153-167.
- Piercy, N., Cravens, D.W. and Lane, N. (2009), "Sales management control level and competencies: Antecedents and consequences", *Industrial Marketing Management*, Vol.38, pp.459-467.
- Podsakoff, P., MacKenzie, S.L., Jeong-Yeon, L. and Podsakoff, N. (2003), "Common method biases in behavioral research: A critical review of the literature and recommended remedies", *Journal of Applied Psychology*, Vol.88, pp.879-903.
- Potosky, D. and Ramakrishna, H.V. (2002), "The moderating role of updating climate perceptions in the relationship between goal orientation, self-efficacy, and job performance", *Human Performance*, Vol.15, No.3, pp.275-297.
- Preacher, K. J. and Hayes, A. F. (2008), "Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models", *Behavior Research Methods*, Vol.40, 879–891.
- Rapp, A., Beitelspacher, L.S., Schillewaert, N. and Baker, T.L. (2012), "The differing effects of technology on inside vs. outside sales forces to facilitate enhanced customer orientation and interfunctional coordination", *Journal of Business Research*, Vol.65, pp.929-936.
- Rapp, A., Schillewaert, N. and Hao, A.W. (2008), "The influence of market

- orientation on E-business innovation and performance: The role of the top management team”, *Journal of Marketing Theory and Practice*, Vol.16, No.1, pp.7-25.
- Robinson Jr., L., Marshall, G.W. and Stamps, M.B. (2005), “Sales force use of technology: Antecedents to technology acceptance”, *Journal of Business Research*, Vol.58, No.12, pp.1623-1631.
- Silver, L.S., Dwyer, S. and Alford, B. (2006), “Learning and performance goal orientation of salespeople revisited: Performance-approach and performance-avoidance orientation”, *Journal of Personal Selling and Sales Management*, Vol.26, No.1, pp.27-38.
- Spanjol, J., Tam, L., Qualls, W.J. and Bohlmann, J.D. (2011), “New product team decision making: Regulatory focus effects on number, type, and timing decisions”, *Journal of Product Innovation Management*, Vol.28, No.5, pp.623-640.
- Steele-Johnson, D., Beauregard, R.S., Hoover, P.B. and Schmidt, A.M. (2000), “Goal orientation and task demand effects on motivation, affect, and performance”, *Journal of Applied Psychology*, Vol.85, No.5, pp.724-738.
- Strutton, D., Pelton, L. E. and Lumpkin, J. R. (1993), “The influence of psychological climate on conflict resolution strategies in franchise relationships”, *Journal of the Academy of Marketing Science*, Vol.21, pp.207-215.
- Sujan, H., Weitz, B.A. and Kumar, N. (1994), “Learning orientation, working smart, and effective selling”, *Journal of Marketing*, Vol.58, No.3, pp.39-52.
- Tellis, G.J., Yin, E. and Niraj, R. (2009), “Does quality win? Network effects versus quality in high-tech markets”, *Journal of Marketing Research*, Vol.XLVI, pp.135-149.
- Thompson, S. (2009), “Price competition in the presence of rapid innovation and imitation: The case of digital cameras”, *Economic of Innovation and New Technology*, Vol.18, No.1, pp.93-106.
- VandeWalle, D. (1997), “Development and validation of a work domain goal orientation instrument”, *Education and Psychological Measurement*, Vol.57, pp.995-1015.
- VandeWalle, D., Brown, S.P., Cron, W.L. and Slocum, J.W. (1999), “The influence of goal orientation and self-regulation tactics on sales performance: A Longitudinal Field Test”, *Journal of Applied Psychology*, Vol.84, No.2, pp.249-259.
- VandeWalle, D., Cron, W.L. and Slocum, J.W. (2001), “The role of goal orientation following performance feedback”, *Journal of Applied Psychology*, Vol.86, pp.629-640.
- Wayne, S. J., Shore, L. M., Bommer, W. H. and Tetrick, L. E. (2002), “The role of fair

- treatment and rewards in perceptions of organizational support and leader–member exchange”, *Journal of Applied Psychology*, Vol.87, pp.590–598.
- Wood, R. and Bandura, A. (1989), “Social cognitive theory of organizational management”, *Academy of Management Review*, Vol.14, No.3, pp.361-384.
- White, D.D. (2008), “A structural model of leisure constraints negotiation in outdoor recreation”, *Leisure Sciences*, Vol.30, No.4, pp.342-359.

Table 1A- Characteristics of the participants and companies (N=158)

Variable	Demographic traits	%
Gender	Male	50
	Female	50
Respondent's working experience	Less than 1 year	7.6
	Between 1-3 years	24.7
	Between 4-6 years	20.9
	Between 7-9 years	29.1
	Between 10-12 years	9.5
	Between 13-15 years	4.4
	More than 16 years	3.8
	25 years old or below	1.3
	Between 26-30 years old	12.0
Respondent's age	Between 31-35 years old	25.3
	Between 36-40 years old	34.2
	Between 41-45 years old	12.0
	Between 46-50 years old	11.4
	51 years old or above	3.8
Company's age	Between 1-5 years old	5.1
	Between 6-10 years old	10.1
	Between 11-15 years old	19.6
	Between 16-20 years old	26.0
	21 years old or above	39.2
Company size (# of employees)	Fewer than 100	26.6
	101-500	19.0
	501-1000	23.4
	More than 1000	31.0

Table 2. Measurement Items

Construct / Adoption	Items
Learning goal orientation (LGO) / Sujan et al. (1994); VandeWalle (1997)	<p>LGO1: It is worth spending a great deal of time learning new approaches for selling new products.</p> <p>LGO2: An important part of being a good salesperson is continually improving your new product sales skills.</p> <p>LGO3: I am always learning something new about my customers and products.</p> <p>LGO4: Learning how to sell new products well is of fundamental importance to me.</p>
Performance prove goal orientation (PPGO) / Sujan et al. (1994); VandeWalle (1997)	<p>PPGO1: I very want my colleagues to consider me to be good at selling new products.</p> <p>PPGO2: It is very important to me that my supervisor sees me as a good new product salesperson.</p> <p>PPGO3: I am concerned with showing that I can perform better than my colleagues when selling new products.</p> <p>PPGO4: I feel very good when I know I have outperformed other sales representatives in my company when selling new products.</p>
Performance avoid goal orientation (PAGO) / Sujan et al. (1994); VandeWalle (1997)	<p>PAGO1: I would avoid selling new products if there was a chance that I would appear rather incompetent to others.</p> <p>PAGO2: I am concerned about selling new products if my performance would reveal that I had low ability.</p> <p>PAGO3: I prefer to avoid new product selling situations where I might perform poorly.</p> <p>PAGO4: Avoiding a show of low ability at selling new product is most important to me.</p>
Sales supportiveness (SS) / Evans et al. (2007)	<p>SS1: When I have a problem related to selling new products, my company provides needed help.</p> <p>SS2: When selling new products, my company is willing to extend itself in order to help me perform my job to the best of my ability.</p> <p>SS3: When selling new products, my company really care about my well-being.</p> <p>SS4: When selling new products, my company cares about my general satisfaction at work.</p>

Sales innovativeness (SI) / Evans et al. (2007)	SI1: My management encourages new idea for selling new products.
	SI2: My company favors new ways to sell new products.
	SI3: My company encourages new approaches in selling new products.
	SI4: My management encourages innovation and creativity when selling new products.
Customer orientation (CO) / Evans et al. (2007)	CO1: My company's new product sales objectives are driven by customer satisfaction.
	CO2: My company pays close attention to after-sales service when it comes to selling new products.
	CO3: Our competitive edge is based on understanding customers' needs when selling new products.
	CO4: Our business strategies are driven by the goal of increasing customer value when selling new products.
New product selling self-efficacy (SE) / Potosky and Ramakrishna (2002)	SE1: I have mastered how to sell new products on a regular basis during my employment.
	SE2: I am certain I can sell new products well.
	SE3: I am able to learn how to sell new products quickly.
	SE4: I sell new products as well as I would like.
New product sales performance (NPSP) / Flaherty et al. (2007); Miao and Evans (2013)	NPSP1: When selling new products, I generated a high level of dollar sales.
	NPSP2: I generated sales of new products.
	NPSP3: When selling new products, I exceed sales targets.

Table 3. Correlations and Descriptive Statistics

	Mean	SD	CrA	CR	AVE	$\sqrt{\text{AVE}}$	1.	2.	3.	4.	5.	6.	7.	8.
1. LGO	5.68	0.93	0.93	0.96	0.85	0.92	--	0.639*	-0.362*	0.66*	0.399*	0.474*	0.546*	0.485*
2. PPGO	5.19	0.93	0.92	0.94	0.81	0.9	0.64*	--	-0.091	0.615*	0.410*	0.360*	0.517*	0.475*
3. PAGO	3.88	1.17	0.92	0.94	0.80	0.89	-0.359*	-0.089	--	-0.310*	-0.147	-0.137	-0.257*	-0.194*
4. SE	5.07	0.84	0.93	0.95	0.83	0.91	0.661*	0.616*	-0.307*	--	0.507*	0.433*	0.676*	0.531*
5. NPSP	4.60	1.13	0.92	0.95	0.86	0.93	0.4*	0.411*	-0.145	0.508*	--	0.344*	0.448*	0.279*
6. CO	5.63	0.75	0.83	0.88	0.67	.82	0.457*	0.361*	-0.135	0.434*	0.345*	--	0.504*	0.363*
7. SS	5.26	.89	0.96	0.97	0.90	.95	0.547*	0.518*	-0.254*	0.677*	0.449*	0.505*	--	0.520*
8. SI	5.20	0.74	0.86	0.90	0.70	.84	0.486*	0.476*	-0.191*	0.532*	0.28*	0.364*	0.521*	--
9. MV							0.002	0.029	-0.073	0.066	0.141	0.147	0.111	0.078

1. LGO=Learning goal orientation; PPGO= Performance prove goal orientation; PAGO= Performance avoid goal orientation; SE= New product selling self-efficacy; NPSP= New product sales performance; SI= Sales innovativeness; SS= Sales supportiveness; CO= Customer orientation; MV= Marker variable.
2. SD= Standard deviation; CrA= Cronach's Alphas; CR= composite reliability; AVE= Average variance extracted
3. All correlations are significant at 0.01. The recommended threshold of AVE is 0.5.
4. Note: Correlations below the diagonal are before the MV adjustment, whereas the correlation above the diagonal are after the MV adjustment (* $p \leq .05$)

Table 4. Results of PLS analysis (N=158)**Dependent variable= New product sales performance**

Hypotheses	Main-effects model	Full-model	Full-model with Marker variable
H1: LGO→SE (+)	0.38(3.57)***	0.38(4.03)***	<u>0.38(3.94)***</u>
H2: PPGO→SE (+)	0.36(4.01)***	0.36(4.89)***	<u>0.36(4.05)***</u>
H3: PAGO→SE (-)	-0.14(1.96)*	-0.14(-1.99)*	<u>-0.14(1.97)*</u>
H4: SE→NPSP (+)	0.51(5.54)***	0.39(2.84)**	<u>0.39(2.70)**</u>
H5: SE×CO →NPSP		0.41(1.96)*	<u>0.39(1.96)*</u>
H6: SE×SS →NPSP		0.35(2.07)*	<u>0.35(2.19)*</u>
H7: SE×SI →NPSP		-0.18(0.90)	<u>-0.18(0.87)</u>
<u>Marker variable</u>			<u>0.05(0.54)</u>
R ²	0.259	0.370	<u>0.371</u>
△R ²		0.111	<u>0.001</u>

-LGO=Learning goal orientation; PPGO= Performance prove goal orientation; PAGO= Performance avoid goal orientation; SE= Self-efficacy; NPSP= New product sales performance; SI= Sales innovativeness; SS= Sales supportiveness; CO= Customer orientation.

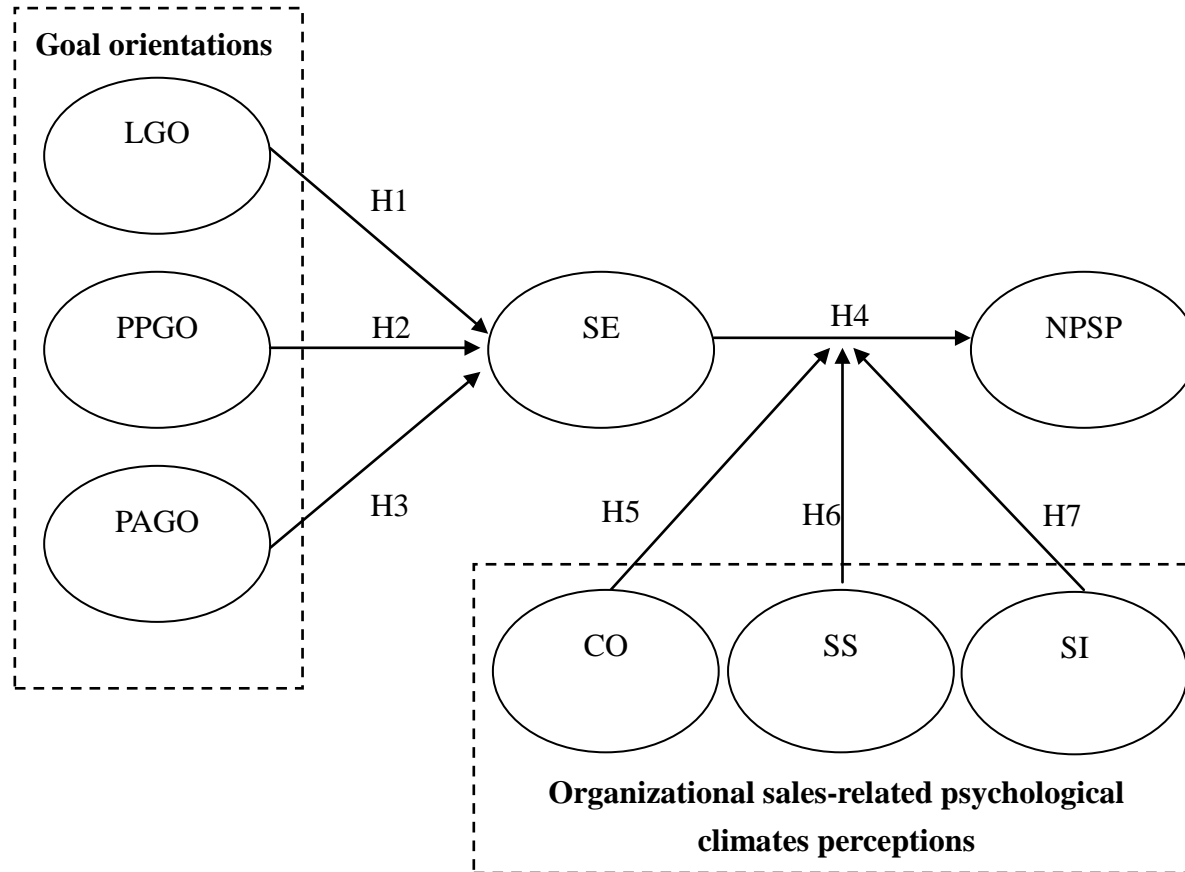
-* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 5. Summary of mediation results for self-efficacy

Independent variable (IV)	Mediating variable (M)	Dependent variable (DV)	Effect of IV on M (a)	Effect of M on DV (b)	Total effect (c')	Direct effect (c)	Point estimate, (95% CI for mean indirect effect)	Result
Learning goal orientation	New	New product sales performance	0.59***	0.46***	0.47***	0.20(ns)	0.28, (0.14, 0.43)	Full mediation
Performance-prove goal orientation	product selling		0.54***	0.46***	0.47***	0.22(ns)	0.25, (0.13, 0.38)	Full mediation
Performance-avoid goal orientation	self-efficacy		-0.25***	0.60***	-0.14*	0.01(s)	-0.15, (-0.29, -0.06)	Partial mediation

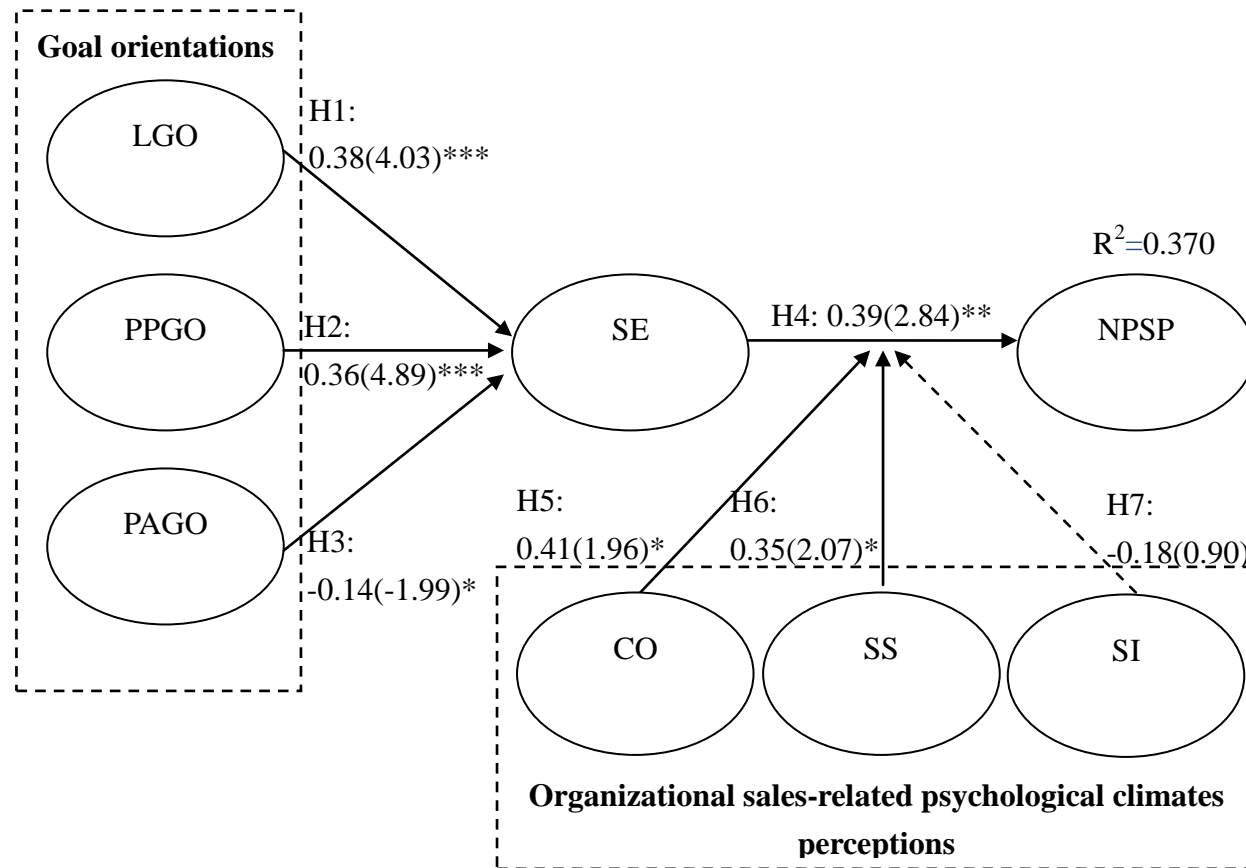
Note: * $p < .05$. ** $p < .01$. *** $p < .001$, ns= nonsignificant, s= significant

Figure 1. Research framework



LGO=Learning goal orientation; PPGO= Performance prove goal orientation; PAGO= Performance avoid goal orientation; SE= New product selling self-efficacy; NPSP= New product sales performance; SI= Sales innovativeness; SS= Sales supportiveness; CO= Customer orientation.

Figure 2. Results from PLS- Final Model (N=158)



Supported= —————→ ; Not supported= - - - - ->

LGO=Learning goal orientation; PPGO= Performance prove goal orientation; PAGO= Performance avoid goal orientation; SE= New product selling self-efficacy; NPSP=New product sales performance; SI= Sales innovativeness; SS= Sales supportiveness; CO= Customer orientation.